

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-------------------------|---------------------|------------------|
| 09/809,050 | 03/16/2001 | Dominique Bernard Riche | T2154-906845 | 4713 |

7590

07/03/2002

Edward J. Kondracki
MILES & STOCKBRIDGE P.C.
Suite 500
1751 Pinnacle Drive
McLean, VA 22102-3833

EXAMINER

GRAY, JILL M

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 07/03/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

BEST AVAILABLE COPY

Office Action Summary

Application No.

09/809,050

Applicant(s)

RICHE ET AL

Examiner

Jill M Gray

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The preliminary amendment of July 16, 2001 has not been entered because the amendment to claim 8 was presented in the French language. All amendments must be presented in the English language.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. In particular, in claim 1, the language of "adapted to momentarily retard propagation of heat to the wire core when introduced into the molten metal bath" is vague because the term "adapted" does not provide a positive recitation of heat propagation retardation properties. Also, it is not clear how the wrapping is "adapted". Accordingly, the metes and bounds for which patent protection is being sought is not clear.
4. Claim 3 is indefinite because the language of "for pyrotechnic applications" is function language drawn to the intended use of the paper and does not provide a positive recitation of the specific properties of the paper.

Claim Rejections - 35 USC § 103

Art Unit: 1774

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nieman et al, 4,163,827 (Nieman).

8. Nieman teaches a cored wire for introducing additive into a molten metal bath comprising an elongated core element and wrapping the core element in a protective casing, wherein the casing is a helically wrapped ribbon strip. See abstract. In addition, Nieman teaches that the strip can be metal or paper composition, without departing from the spirit of his invention and that the core element can have more than one casing. See column 5, lines 1-24. This teaching would have provided a suggestion to the skilled artisan that a metal strip and paper strip could be used interchangeably with a reasonable expectation of success. Accordingly, the skilled artisan would immediately envisage dual metallic ribbon strip layers, dual ribbon layers of paper composition, and combined dual layers of a metallic ribbon strip and a paper composition. Therefore, it

Art Unit: 1774

would have been obvious to one of ordinary skill in the art at the time the invention was made to produce a cored wire as taught by Nieman, comprising an elongated core element and wrapping said core element in dual layer protective casing, wherein the first layer is a metallic ribbon strip, thereby forming a metallic sheath, and the second layer is a ribbon strip of paper composition, with the reasonable expectation of obtaining a cored wire for introducing additives into molten metal bath, motivated by the teachings of Nieman.

9. Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nieman '827 as applied to claims 1-7 above, and further in view of King et al, 6,346,135 B1 (King).

10. Nieman is as set forth above but does not teach the addition of a protective metallic casing disposed on top of the wrappings. King teaches a cored wire for introducing additives into a molted metal bath comprising a wire core, metallic sheath and protective jacket disposed over said metallic sheath. Moreover, King teaches that the outer jacket has a higher melting point than the core materials which leads to effective introduction of the additives to the molten metallic bath without melting the core materials. Thus, it would have been obvious to the skilled artisan to modify the teachings of Nieman by including a protective metallic casing disposed on top of the wrappings, as taught by King in order to result in effective introduction of additives to the molten metallic bath.

11. No claims are allowed.

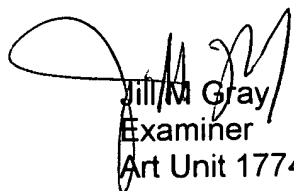
Art Unit: 1774

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M Gray whose telephone number is 703.308.2381. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703.308.0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.5408 for regular communications and 703.305.3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0651.


Jill M Gray
Examiner
Art Unit 1774

jmg
June 29, 2002